

REMARKS

Claims 1, 2 and 4 were pending. Claim 2 has been amended. Claims 1 and 4 have been canceled. Upon entry of these amendments claim 2 is pending and under consideration.

I. CLAIM AMENDMENTS

Claim 2 has been amended to clarify its subject matter and to add missing steps of the claimed method. Support for these amendments can be found, for example, on page 5, paragraph 24 of the specification as filed. Accordingly, these amendments do not introduce new matter. Entry thereof is respectfully requested.

II. ELECTION/RESTRICTION

The Examiner argues that claim 2 as amended in response to the Office Action dated October 11, 2005, is drawn to non-elected subject matter. Applicants have amended claim 2 to recite a method for controlling movement of a complex of 11kDa Ca^{2+} binding protein p11 and Hepatitis B virus polymerase in the HepG2 cell, which is believed to be an elected subject matter.

III. THE REJECTION UNDER 35 U.S.C. § 112, 2nd PARAGRAPH

Claim 2 is rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner argues that the limitation of “decrease” is a relative term subject to various interpretation, and that the metes and bounds on the intended agent are not defined.

Claim 2 is also rejected under 35 U.S.C. § 112, second paragraph as allegedly being incomplete for omitting essential elements and steps.

Careful consideration has been given to the Examiner’s remarks. Reconsideration is respectfully requested in view of the amendments made to claim 2.

Applicants have amended claim 2 to recite a method for remaining a complex of the 11 kDa Ca^{2+} binding protein (p11) and a Hepatitis B virus polymerase (HBVPol) in the cytoplasm of a HepG2 cell, said method comprising the steps of treating the HepG2 cell with an agent that increases an intracellular calcium ion concentration and preventing the complex from migrating to a nucleus of the HepG2 cell.

As amended, claim 2 recites the essential elements and steps suggested by the Examiner and, therefore, is complete. Additionally, the limitation of “decrease”, objected to by the Examiner, has been deleted from the claim language, rendering the rejection moot with regard to this terminology.

Regarding the Examiner’s objection to the recitation of “agent”, Applicants respectfully submit that the technical feature of the claimed method resides in the fact that increasing the intracellular calcium ion concentration prevents movement of the p11/HBVPol complex into the nucleus of the HepG2 cell. In particular, when the HepG2 cells, co-delivered with the p11/HBVPol complex, are treated with a calcium ion concentration increasing agent (*e.g.*, valinomycin), the complex remains in the cytoplasm of the cell and does not migrate to the nucleus thereof (*see*, for example, page 11, paragraph 59 of the specification as filed).

Accordingly, the technical feature of the instant invention does not reside in what type of an agent is employed and how much the concentration of calcium ions is increased. It rather resides in whether the movement of the p11/HBVPol complex into the nucleus of the cell is blocked as a result of the increased intracellular calcium ions concentration.

In this regard, it is respectfully submitted that the agents commonly used in the pharmaceutical field for purposes of increasing the intracellular concentration of calcium ions (*e.g.*, valinomycin, exemplified in the subject application) are well within the knowledge of a skilled artisan and might be easily employed in the methods of the instant invention. Accordingly, there is no need to further define the limitation of “increase” and the type of “agent”. As such, claim 2 is definite. Therefore, it is respectfully requested that the rejection of claim 2 under 35 U.S.C. §112, second paragraph, be withdrawn.

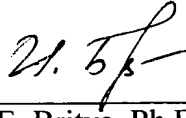
CONCLUSION

Applicants respectfully submit that claim 2 satisfies all the criteria for patentability and is in condition for allowance. An early indication thereof is respectfully solicited.

No fee is believed to be due with this submission. However, should any fee be required, the Commissioner is authorized to charge all required fees or credit any overpayment, to Jones Day U.S. Deposit Account No. 503013, referencing Attorney Docket No. 8111-032-999.

Respectfully submitted,

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by: Irina E. Britva, Ph.D, Patent Agent Reg. No. 50,498
for: Anthony M. Insogna Reg. No. 35,203

JONES DAY
222 East 41st Street
New York, NY 10017
Tel.: (212) 326-3778